



APPLES B.C. NEWS

OCTOBER 1989

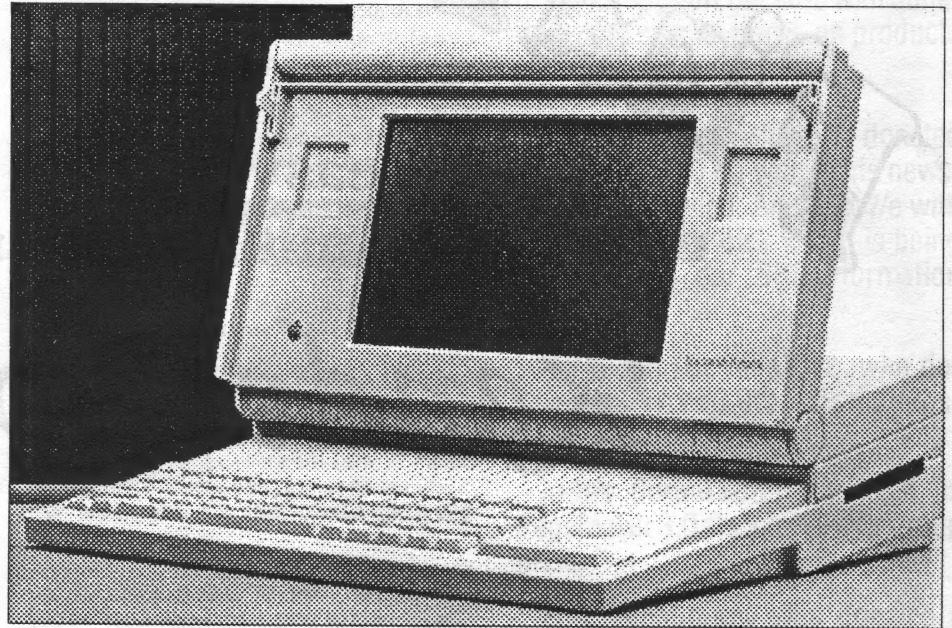
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At last – a Mac for the road!

Portable Mac, IICI hot-shot wrap up Mac 'Year of CPU'

UNIVERSAL CITY, Ca. —Apple Computer, Inc. added portability and more power to its Macintosh line on Sept. 20 in presenting the Macintosh Portable and the Macintosh IICI.

The Macintosh Portable is a full-function Macintosh in a portable design. The Macintosh IICI is a high-performance version of Apple's popular Macintosh IICx. Running at 25 MHz and offering new capabilities such as built-in video, the Macintosh IICI is the most powerful Macintosh that Apple has ever developed. "With this announcement, Macintosh becomes the only comprehensive product family in the industry to offer users consistent personal computing," said Jean-Louis Gassée, president of Apple Products. "This means all Macintosh customers have a sweeping range



Weighing in at 7.16 kg (15.5 lb.) with 40-Mb hard disk, the Mac portable will be comfortable in only hefty laps. The flat screen display is said to be outstanding.

of hardware and application choices—and they're all based on a single, unified software architecture. Perhaps most important, it means that more and more people can find a Macintosh to fit their individual needs."

The portable incorporates all traditional Macintosh benefits into a system

that customers can take with them. Notably, it features advanced screen technology, sophisticated power management, all-in-one design, and complete Macintosh compatibility.

The portable uses state-of-the-art Active Matrix Liquid Crystal Display tech-

● *continued on page 11*

Healthy turnout raises Mac group organizers' hopes

By Steve St-Laurent

Apples B.C.'s Macintosh division got the new season off to a strong start Sept. 26 with more than 40 members and visitors jammed into a meeting room at the Oakridge-Marpole Community Centre.

Several months of poor attendance before the summer break had led meeting organizers to be conservative in booking space. The extra bodies were welcome—even if one belonged to club president Pat Daley — and it's generally hoped this is a sign of growing interest in the ABC group devoted to the ever-expanding world of the Mac.

Daley attended to plug the club's 10th

anniversary dinner. The date is Oct. 21, the place is the Delta River Inn, Richmond, and the price is \$35 a head. John Sculley has declined the chance to mark the birthday of Canada's oldest Apple computer user group, we hear, but someone interesting and important is sure to be there.

Should this newsletter reach you in time, tickets are available from club executive members (phone numbers on page 3).

Apple's announcement of a portable Mac and the screamer Mac IICI prompted some discussion. Details of the cheaper model—a real MacTote—you see above. Neither machine was available for

demonstration but the portable is now on view at an Apple dealer near you.

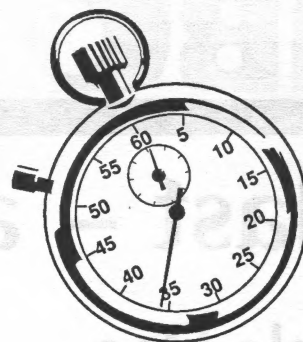
Computerland's **Jim Baglot** was hard-pressed to be expansive on the subject of Macs and networks but it was not for lack of information. Most members are working in stand-alone situations. The

● *continued on page 13*



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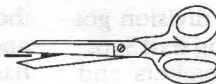
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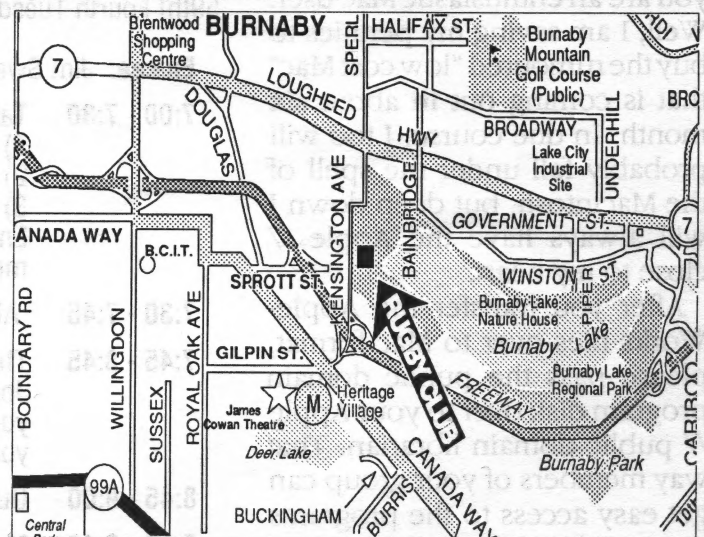
Andy Kenmuir likes this program 13

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NOTICE BOARD

**Mac
meeting
agenda**

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Apple // meeting: (Burnaby Lake Club House) Regular meeting is scheduled for November 6. Starting time is 7:30 p.m.

OCTOBER

S	M	T	W	Th	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Apple // meeting — Oct. 02 at the Burnaby Lake Clubhouse. Starting time 7:30 pm.

Macintosh meeting — Oct. 24 at the Marpole-Oakridge Community Centre. Starting time 7:30 p.m.

Executive meeting — Oct. 10 at Anson Barrows' place. Phone an exec member ahead of time if you wish to attend.

Swap meet — Oct 21 at the MacPherson Centre. Starting time 10:00 a.m.

Anniversary dinner — Oct. 21 at the Delta River Inn. Starting time 18:00 p.m.

Apple II-GS S.I.G. — Oct 26 at Sir Frederick Banting School, see page 5 for details.

Apple // still close to this user's heart

Dear Ib

Thanks for sending me copies of the recent issues of Apples B.C. News. I enjoyed reading thru the different articles.

I see from the newsletter that you are an enthusiastic Mac user. Well, I am saving my pennies to buy the rumoured "low cost Mac" that is coming out in about six months. In due course, I too will probably fall under the spell of the Macintosh, but deep down I will always have the Apple // close to my heart.

After you transfer the AppleWorks files over to Mac format, please pass the public domain program disk over to your Apple // public domain librarian. That way members of your group can get easy access to the programs discussed in the articles.

Cordially,

Phil Shapiro

Club Page

Computer ergonomics article draws a few tips from member

Dear Ib/Steve

Thank you for the September newsletter. You won't hear me complain about missing the August issue because I was on vacation plus I know how much work is involved.

The article by W. E. Kelsick, D.C., on "Workstations and the Musculo-Skeletal System" was both interesting and informative. This article focused mainly on musculo-skeletal aspects and less on workstation ergonomics (design of one's work environment).

Due to the fact that as part of my job, I deal with workers, some of who have adverse affects from workstations, I have particular interest in these matters.

The article by Dr. Kelsick is well worth clipping and keeping. It should also be read more than one time by those with computer terminals in their home and/or at work.

Glare from both indoor lighting and from natural sunlight on Video Display Terminal screens has been recognised as the number one problem since their inception. Fortunately, most of us who

have VDTs in our home do not have fluorescent lighting, which is more inclined to produce glare. Two fluorescent tubes which may be considered are: Vitalight and the GE 7500 Kelvin (\$10.21 for the latter). Glare from fluorescent lights can be reduced by installing defusers which consists of approximately half-inch squares. They cost around \$55 for a two-by-four foot fixture (you remove the old defuser, carefully measure it and order the replacement). The very best type of lighting is indirect lighting which is adjustable in intensity and which bounces the light off the ceiling. The GE tubes and these defusers are available locally from companies such as Westburne Electric on Ontario Street.

The rule of thumb about lighting for VDTs is that it should be about two-thirds the intensity of normal office lighting. When the VDT operator must work from copy, then it may be necessary to install special task lighting which should be adjustable in intensity and direction. The key being that the difference to the eye

● *continues page 13*

MAC MEETING AGENDA

Apples B.C. regular monthly Macintosh meeting (Note: Formal proceedings start at 7:30 p.m.) Location: Marpole-Oakridge community centre, 2nd floor (Free parking in parking lot at rear and on-street) 990 W 59th Ave (corner of Oak St. & 59th) Fourth Tuesday, October 24, 1989

Emcee: Jim Swenor

7:00 - 7:30

Table top displays on specific topics:

- 1) Public domain library
- 2) ABCCS memberships,
- 3) Beginner corner.

Entirely informal, a chance to ask/answer questions member-to-member.

7:30 - 7:45

ABCCS Society news, announcements

7:45 - 8:45

The 'Mac' - what's special/what's not presentation: explained by Joe Gagnon & Glenn Schiller, Byte Computers representatives. "If you don't know very much about the 'Mac', this evening will throw you a ton of information, Gagnon at his best."

8:45 - 9:00

Questions/Answers

9:00 - 9:40

Mac diskette library update - John Spraggs, librarian mini-copying session

9:40 - 9:55

Wind-down of meeting, last minute comments, etc.

Union safety rep offers VDT safety-comfort tips

● continued from page 4

should be kept to a minimum between the two light sources, but sufficient to light the copy material.

Failure to adequately provide proper lighting will lead to complaints of headaches, eyestrain and overly dry eyes.

Another topic which should not be overlooked is that of Repetitive Strain Injuries to the upper extremities, the fingers, hands and arms. There is no doubt that carpal tunnel syndrome, tendonitis and tenosynovitis are becoming common Workers Compensation claims among VDT operators. Unfortunately nearly all such claims are initially rejected due to Board policy.

New information from a study done in Santa Clara County, California cites that cumulative trauma disorders (another term for RSIs) which are work-related, account for 47 per cent of reported cases. The Workers Compensation Board in B.C. rejects most claims of these types of injuries because under Schedule B of the Workers Compensation Act the criteria for claims is that the claimant must encounter "repetitive and forceful" conditions. This makes claims for workstation operators difficult to prove and results in numerous appeals to the Board of Review.

The ergonomics of workstations and work schedules needs to be such that RSI claims are substantially reduced. Only a positive attitude by employers and knowledge by keyboard operators, whether at home or at work, will accomplish this. Chairs should be easily adjustable, have five legs and come with a foot rest when necessary. Arm rests on chairs are usually not advisable for operators with heavy inputting tasks because the arm rests can restrict elbow movement.

Keyboards should be as thin as possible, being 720 to 750 mm from the floor. The desk should also be thin (no drawer please), providing leg room of 650 to 690 mm from the floor. More information is available from the WCB publication Working with Video Display Terminals.

It is also important to take regular breaks. Unfortunately the micro has made us all so gung-ho to input, that we all too often forget to take breaks. My son uses our Mac to do his homework and often sits there for hours at a time until reminded to take a break. Mixing different work functions with keyboarding also helps.

In summary, if one has headaches, sore eyes, dry eyes or experiences numbness on the ends of the fingers or pain in the wrists (often at night), then it is high time to look for causes and make the necessary

adjustments to reduce the symptoms. It is all common sense, we just don't think about it at the time. Again, congratulations on your excellent article.

Harold Funk

Vice-President and Health and Safety Representative
Communications Workers of America
Local 226

Apple IIGS Special Interest Group Meeting

MEMBERS ONLY

Thursday October 26, 7:30PM at Sir Frederick Banting School off Como Lake Avenue in Coquitlam.

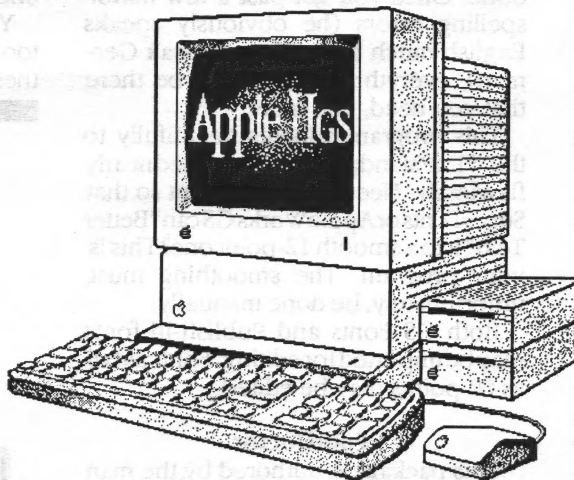
AGENDA

Your choice. HyperStudio?
Font Editors? Problems?
Michael Gatto will be there with his video digitizer. If you have something you'd like digitized, bring it along.

Thanks to Scott McLagan, the Banting Computer Lab's expert.



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Adventures in Apple // font editing

GS Font Editor version 1.2
by Mark Simonsen
Beagle Bros, US\$50
requires Apple //c, //e or IIGS, and
a mouse.

FontDoctor version 1.0B12
by Mark Collins
Shareware, US\$15
requires Apple IIGS

FontEdit version 2.01
by Gerhard Kress
Shareware, US\$15
requires Apple IIGS

First, an inescapable fact: creating a set of characters is a tedious chore. There is no way to tell the computer what you want without drawing it pixel by pixel. Sure, you can edit an existing font, but that ends up being almost as much work.

Apple // fonts over the years have taken a variety of forms and filetypes. Nowadays, the only form warranting our attention is the "GS Font" which has become the standard for all GS programs, and is also adhered to by TimeOut SuperFonts, a Beagle Bros AppleWorks enhancement. (See Apple BC News, May 1988.)

GS Font Editor

All three of the above programs edit GS Fonts. The Beagle product is the only one of the three that will run on any Apple // which has a mouse attached and can do double hi-res graphics. The Beagle product is a polished commercial package and is a breeze to use. My 11 year old son had no difficulty editing a font to his liking, defining 36 characters in about 2 hours work. The documentation is typical of this company's manuals: easy and short. Their products are such that manuals are almost unnecessary.

As a beta-tester for Beagle, I have pointed out a feature that this package needs: "undefine". A font can contain as many as 255 characters, but typically contains fewer. The others are "undefined": when such a character is typed from the keyboard (there are key combinations that permit all 255 to be selected) a special "undefined character" shows. Probably you have noticed the square box, or the inverse question mark as



LORNE'S CORNER

examples of these. In GS Font Editor 1.2, there is no way to undefine a character.

Fonts as tall as 127 points (72 points = one inch) may be designed/edited in a 40x40 pixels view-box. The package contains features that make the job easier; cut/copy/paste, simultaneous display of the font in its bold, italicized, shadow (etc.) styles, and a nice doubles facsimile of the GS' standard file dialogs, are but a few. It does not support invert or flip, which might be useful in some situations.

It might be considered a serious deficiency in the manual, the lack of an appendix about font family numbers. This issue is well documented by the other packages (see FONTDOCTOR below.)

GSFontEditor is not copy-protected. It is a good package which is really your only choice if you don't own a GS, and is not at all a bad choice if you do. If you do, do your eyeballs a favour and switch the control panel's Display menu to "Monochrome".

FontEdit

This inexpensive product by a German shareware author is quite nicely done. Once you get past a few minor spelling errors (he obviously speaks English much better than I speak German), everything appears to be there that you need, and more.

This program adheres beautifully to the WIMP standard, and performed nearly flawlessly. Need a 24-point font so that SuperFonts or AppleWorks GS can "Better Text" it to a smooth 12-point one? This is your program. The smoothing must, unfortunately, be done manually.

Both GS Fonts and Publish-It! fonts may be imported for editing. Fonts as tall as 60 points may be edited.

FontDoctor

This package is authored by the man who probably knows more about fonts for the GS than anyone else. Mark Collins is the leader of the A2-Central Font Clearinghouse, which is responsible for assigning a unique number to each font. (This is an attempt to avoid the disaster

which struck the Mac world when suddenly there were umpteen different fonts with the same number, confusing Desktop Publishers to no end.) If you have designed a font which you think is good enough to be released to the public, you should contact A2-Central first to obtain a number for it.

Mark's program is the least polished of the three, and the least adherent to the graphic standard. It has the advantage, being shareware, that Mark is able to work slowly and steadily to enhance it. The same appears to be true of the Kress program. Enhancements proposed by Mark include the ability to import AND export other font types, such as GEOS and Print Shop fonts.

A nice feature is the ability to display an entire font in the style (bold, italic, etc.) of your choice. Hopefully Mr. Collins will also enable the cut/copy/paste feature in the future. FONTDOCTOR will resize a font to any size from 1 point (!) up to 68 points. Fonts up to 95x95 pixels may be created or edited.

Want a peek?

Both shareware products with their documentation are available on Apples BC Library disk #IIGS.049, and both deserve a look before you decide where to spend your money. The folder that these are in contains a pile of information about fonts, and came to me from Mark Collins at the A2-Central Developer Conference. A third shareware font editor, FONTASM version 1.1 has just come to my attention, too late to be included in this review. The author asks US\$20. This one will be on disk #IIGS.069.

You should look at the Beagle product too. A GSSIG will be a good place to view these, if members are interested. 



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User-Supported

This newsletter has no staff.
The readers make it as good
as it is (or isn't).

Smart Art – in search of a better bitmap

Smart Art

by Ed Hall and Randy Adams
version 1.01 March/89
Emerald City Software
Requires: PostScript printer

By Steve St-Laurent

The screen representation of fonts on the Mac, most users know, depends on the sizes of screen fonts installed in or otherwise mounted on the System file.

Short of building huge system files with all possible sizes of each font used, we have come to accept jagged screen representations of faces. We assure ourselves that what we see is only a ghost of what we'll get on final printout to a PostScript printer.

Of course, all this will change with Apple's release of its outline font technology as part of System 7.0. And Adobe Systems' release of its Font Manager offers similar results now with Adobe's wide range of typefaces. Both technologies work from font outlines which are scaled and tweaked to improve both the screen display and printed output to all devices, not just PostScript ones.

One area in which screen representation has been especially poor is with text embodied in Encapsulated PostScript artwork – the kind generated by Illustrator and FreeHand to name two. In the

Top and middle are screen representations in Univers Black. Bottom is the PostScript output. The top image has been improved by reimagining the EPSF file's screen representation using Smart Art

**bitmap
bitmap
bitmap**

case of the former, the screen display was deliberately altered by Adobe to protect its PostScript font information.

EPSF art with text in it has a lousy screen appearance most of the time. Now there's a workaround.

The screen representation in an EPSF file is simply a bitmap PICT stored in the file's resource fork. If that bitmap is improved, so is the screen display.

Smart Art is a nifty desk accessory that does just that. Its secret is that it uses the PostScript interpreter in a laser printer to create a better bitmap. The obvious catch is that you need a PostScript printer for Smart Art to work.

How does it work? The file is sent to the printer, but instead of the image being printed, the information is sent back to the computer as a sharper bitmap.

There is a second catch. Downloadable typefaces – those not resident in ROM on the printer – must be downloaded before reimagining the artwork with Smart Art. If you don't the result will be a beautifully mapped Courier disaster.

Shipped with Smart Art is "Vol. I Special Effects" – 15 or so special type effects, everything from simple rotated type to type bound to the shape of a circle.

I found the special effects to be of limited value. The letter-spacing is sometimes god-awful.

Still, the package is eminently useful for those many Mac users who have a PostScript printer handy, and are eager to have what's on screen match as closely as possible the final output. **ABC**

GS library update

By Lorne Walton GS Librarian

Since I last reported to you in July, no fewer than 29 new disks have been added to the GS Public Domain Library.

Disk #11GS.049: NDA's - DESK.COLOR, (changes the Finder's desktop colour), MEMPIE (displays a pie chart representation of GS memory use), KALEIDO (colour graphics display), and FORMATTER. CDA's - AREACODES & MOUSETRAP (allow keyboard commands to substitute for mouse input - useful if you're handicapped or if your mouse dies.) Solitaire games: POKER and MONTE. Some DA's of interest to programmers, a set of hard disk formatting tools (written in BASIC), and new versions of JUMPSTART (2.3) & CHGFILE (2.46). And finally, two shareware font editors, their documentation, and lots of technical info about fonts.

Disks 50 through 58: Fonts, averaging

about 100 fonts/sizes per disk. These were provided by Mark Collins, the A2 Central Font Clearinghouse leader, and are in no particular order. A listing of the contents of each disk will be available at copy sessions. If members are interested in a particular font, ask! I can upload a selection to the BBS.

Disk 59: Also from Mark Collins - five AppleWorks GS graphics files containing samples of most of the fonts on the above disks. Also descriptions of the GS Font standard, and the A2 Central Font Clearinghouse.

Disks 60 & 61: More fonts!

Disk 62: 54 more fonts, plus FONTENGINEER, Mark Collins' NDA for adding to your list of active fonts, on the fly. Also Mark's Pascal source code for the NDA.

Disk 63: The May 89 Apple II Technical Notes, SHRINK-IT 2.1, CHG.FILE 2.66 (now converts AppleWorks 3.0 files to older AppleWorks format), STARS - a space-flight demo showing the stars whizzing by. DOGPAW 3.30 (works with AppleWorks 3.0 AWP files) and more.

Disks 64 & 65: The new SYSTEM 5.0 just

received from Apple-Canada for distribution.

Disk 66: DELUXE PAINT II demo.

Disk 67: SPEEDYSMITH - the superb new, fast whole-disk copying program from Europe. Uses a faster DOS, and therefore you will be unable to place any other files on the disk. Beware: it will trash anything on a / RAM5.

Disk 68: NUCLEUS - marvellous graphics and animation, and unbelievable sound. Uses the same SPEEDYBOOT DOS as disk #67.

Disk 69: FONTASM 1.1 (another font editor) is the only thing so far on this disk.

Because of the addition of the new font disks, I am planning on removing the four old font disks, #16 thru 19. If anyone has objections, please let me know.

Just arrived from Roger Wagner Publishing is a set of 9 3.5" disks for use with HyperStudio. Eight of the disks are demos and are in the Public Domain. I would like to propose that I make the eight available to users for a special copying fee of \$10 for the whole package. Most of the disks are pretty full, but

● *continued on page 12*

Buy a removable storage hard drive and win a trip to Bangkok!

By Brian Symonds

Several months ago, Mr. Nobody crashed my hard drive. The hard drive was working fine when I tucked it in one night but the next morning the Mac would not start from it, and my wife, after denying that she had used it, told me she had heard it making a "funny noise" earlier in the morning. And no, I didn't have "a backup", though I didn't lose any data I store all my data files on floppy disks, and do have a backup for each of my programs.

Actually I had a backup of sorts for my hard drive. I had previously backed up about 20 MB to floppies before I gave up to do something more pleasant - mixing cement. After using every hard drive recovery program I could get my hands on, the drive was still not mountable, and it had to be sent back to its creators to have "low level formatting" done before it was operable again.

I do not understand why drive companies have not seen fit to provide us users with "low level formatters" although recently at least one such program has become commercially available.

When I began researching the ways to make hard drive backups, I found that most of the articles in the commercial press were almost a year old. The choice in these articles seemed to be between tape backup and another hard drive. Since tape backup was almost as expensive as a hard drive, and

slower, and a second hard drive has the advantage that it can be pressed into service upon failure of a main drive, I began looking at getting another hard drive. The articles in the June/88 MacUser and November/88 Macworld commented favourably on removable storage drives.

It seems that there are two types of removable storage hard drives, ignoring of course WORM drives and CD-ROM systems. In the less common type of drive, the whole hard drive mechanism is removable for obvious reasons, this type is more expensive than the other type, the removable cartridge drive or RCD.

The RCD is like a huge floppy disk. It consists of a disk drive into which you put a cartridge, the cartridge being some type of storage medium encased in a protective shell. In general the cartridges are about the size of an Apple II or IBM 5.25 floppy, but thicker. RCDs are random-access devices, and can be mounted on the desktop just like a floppy. This creates the first problem with these drives however - unlike a floppy, under some conditions, the Mac may not be able to tell that the RCD is present. This happens because of the type of driver that each type of disk drive uses to communicate with the Mac.

A driver is computer code that gets written onto a specific area of a disk when the disk is formatted. If the Mac system is able to read the driver, it gets information about the disk such as how to mount the disk, and what information is on the disk.

When you first start your Mac, the system examines all disk drives connected to it and looks for inserted disks. If there are any, the Mac finds the driver for the disk and loads it into memory (if there aren't any you get a sad Mac!). This procedure is the same for floppies, hard disks, and RCDs.

If your hard disk is on when you start up, it is considered to be "inserted" and this is why it is always recommended that you turn your hard drive on before you start your Mac.

Once the Mac has loaded the driver into memory, it can read the information about the disk and mount it on the desktop.

Since the system is only instructed to get a driver and copy it to memory at startup, what happens to disks that are "inserted" or drives that are started up after the Mac is started? For floppy disks, there is a routine in the read-only memory area of the Mac that constantly checks to see if a floppy has been inserted and if one has, its driver is loaded into memory, and the disk appears on the desktop.

Unfortunately there is no code in the Mac looking for the "insertion" or start up of hard drives or RCDs. If you turn on your hard drive or RCD after startup, or insert a cartridge into the RCD after startup, the Mac ignores it.

Some of the hard drive companies provide a program that is placed in the system folder (an INIT) that tells the Mac to look for hard drives just like it does for floppies. This has the advantage that you can turn your hard drive on after you start your Mac and it will be recognized. Other companies include code in their driver so that the RCD is treated almost like a floppy in terms of inserting and removing cartridges, but the drive still must be turned on before your Mac is started for the drive to be recognized.

The November/88 Macworld gives a comparison of some of the RCDs available in terms of the type of cartridge they use, their capacity, their access times, their mean time between failures, their warranties, and their prices. Unfortunately no comparison was given regarding the value of supporting documentation and software (if any), which, as anyone who has any type of peripheral knows, is almost as important as the above information.

Because RCDs are relatively new, comments about documentation and reliability can only be gleaned from some of the major information exchange services such as MacNET. By listening in I learned the following.

It appears that RCDs using a Syquest

● continues page 12...

ABCCS COMMITTEES

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Deadline for newsletter
submissions is the 20th
of the month — lb

The Beagle Applesoft Basic Compiler

By Phil Shapiro

Applesoft BASIC is one of the most popular programming languages for the Apple // family of computers. It's easy to learn, flexible to use, and compatible with every Apple // computer ever sold. Applesoft is built into every Apple // computer since the antique Apple //+, so it's immediately accessible to everyone. Even the ancient, "original" Apple //s, from circa 1978, can run Applesoft BASIC programs (when installed with an Applesoft BASIC language board).

Although the acronym BASIC stands for "Beginner's All-Purpose Symbolic Instructional Code," Applesoft BASIC is used by more than a few professional programmers. And Applesoft is by far the most popular programming language for amateur Apple // programmers. You need only look at the mounds of public domain programs written in Applesoft to appreciate the great flexibility of the language.

But Applesoft does have one important limitation: sometimes it can be as slow as a snail with two broken legs. The reason for Applesoft being slow is that it's an interpreted language. Each time you run an Applesoft program your Apple // has to translate each line of code into instructions intelligible to the CPU.

In many programs this translation process does not slow the program down appreciably. After all, your Apple // can carry out hundreds of instructions in one second. But in other programs the translation of Applesoft lines into lower-level "machine language" code slows the program down to an unacceptable crawl.

"What to do?" you sigh impatiently. Never fear, Beagle Bros to the rescue. Beagle Bros is a company that built its reputation by selling extraordinarily useful software tools to Apple // programmers. (These days Beagle Bros has shifted their marketing emphasis to the sale of AppleWorks enhancements.) Back in 1986, Beagle Bros released their latest programming tool, the Beagle Compiler.

Translates into machine code

The Beagle Compiler is a program that translates your Applesoft program into low-level "machine code" before the program is run. Then, when you run your "compiled" program, the program zips along from anywhere between two to 15 times faster than it did before. All of a sudden Applesoft BASIC is not only easy to learn and flexible to use: these days good old Applesoft is fast and powerful too.



To be honest, the Beagle Compiler is not a panacea for all Applesoft woes. Some Applesoft programs are not speeded up much by being compiled. Programs that make heavy use of the random function (RND) or the trig functions (SIN, COS, and TAN) do not run at lightning speed. And some Applesoft programs are just not useable when running at a super fast speed.

The benefits of compiling

But your average Applesoft program that seems a little weary and fatigued in normal operation will benefit splendidly by being compiled. In the few seconds it takes for the Beagle Compiler to work its magic, your program will regain that youthful bounce in its step.

"So how do you go about using the Beagle Compiler?" you might ask. Well, the best thing about this compiler is its ease of use. You don't need a PhD in computer science to use it. Even beginning programmers could learn how.

Having just said the above, it behooves me to add that to get the most out of this compiler, you really ought to have a solid familiarity with Applesoft BASIC and the ProDos operating system. You can use the compiler easily if you have simple programs to compile. But if your programs are long and/or complicated, you'll have to study up a bit to make use of the advanced features of the compiler.

The documentation that accompanies the Beagle Compiler is concise, informative, and complete. Used in conjunction with the demonstration programs on the disk itself, the documentation does an exemplary job of explaining what you need to do to use the compiler. Basically, all you need to do is: 1) Boot the Beagle

Compiler disk, 2) Take the disk out of your disk drive, 3) Put your own ProDos based Applesoft disk in the drive, and 4) Type, RUN followed by the name of the program you want to run at compiled speed.

Your disk drive will then whirr, the compiler will take about five to ten seconds to "do-its-thing," and very soon your program will be off and running at machine language speed. Easy enough for a second grader, come to think of it.

If you are a thoroughly devoted speed demon, the Beagle Compiler also allows you to compile your Applesoft programs to disk. The compiler can actually translate your program into pseudo machine-language code, and then save that code to disk. To do this, just type the command COMPILE, followed by the name of the program you want compiled, and the name you want the ensuing compiled program to be saved as.

Compiling to disk is nifty

Once a program is compiled to disk, you can run it at the fast speed without even waiting the usual five to ten seconds for the compiler to translate your code. Pretty darn nifty, don't you think?

The Beagle Compiler opens up whole new programming possibilities for creative Applesoft aficionados. Gone are the nagging speed limits of old. Combined with the new Zip Chip speedy CPU's, and the fast CPU's of the Apple II-GS and //c+, Applesoft BASIC is sure to enjoy a resurgence among amateurs and professionals alike.

When Bill Atkinson first introduced HyperCard for the Macintosh, he likened the flexibility and ease of use of HyperCard to Applesoft BASIC. Like HyperCard, Applesoft BASIC is a wonderful "erector set": simple to use, fun to play with, practical to build upon.

The Beagle Compiler runs on all Apple //s from the Apple //+ to the Apple //c+. In the great Beagle Bros tradition, the disk is not copy-protected.

The Beagle Compiler sells for about \$46, mail order. (i.e. Silicon Express). A big thanks is owed to Alan Bird, the inspired creator of the Beagle Compiler program.

(The author, an educational software developer, used the Beagle Compiler in constructing the JoyReader Shareware disk and the Large-Text JoyReader disk. Both disks are available from user groups and other public domain sources.)

Impressions of Applefest '89

By Lorne Walton

Others will be doing "the complete review" of AppleFest '89; I just want to pass on some feelings.

I wasn't going to go, but a certain Irishman talked me into it, arranging low airfares and cheap accommodation. No fewer than eight ABCCS members descended on Frisco's Brooks Hall. Most of us took up residence in a borderline-sleazy hotel under a noisy freeway. The show was okay; the company was great fun!

Peter Sandys, of Apple II marketing helped us get into the Apple Company store in Cupertino. Lois Dinsmore from Toronto, the Apple Canada User Group Support person, treated a number of us Canucks to a nice lunch, and made sure we could all get into the User Group Breakfast.

Those in charge of the breakfast didn't seem to bat an eyelash at the number of Canadian attendees, whereas last year we had to twist arms and tell lies (almost) to get in. I guess it pays to be pushy. Bravo for Lois! Let's hope she stays in that role for a while. And thanks to Peter as well.

Rumours last year had it that the Macintosh was going to be a major part of the AppleFest '88 show, which by tradition has always been an Apple II affair. We Apple II'ers were relieved that the Mac presence in '88 was rather inobtrusive. Such was not the case this year. The exhibition area was smaller, but the Mac presence was greater. While last year the Macs were integrated into Apple II displays, this year there were booths dedicated solely to Macintosh. Apple's booth itself was almost 50% Mac and included the new portable. I hope this isn't a trend. The Mac people have several shows every year... AppleFest is the Apple II folks' sole major semi-annual event.

Software bargains

The biggest commotion at the show was always around the tables of two big software discount houses. Bargains abounded, and many items were sold out by the end of the second day. Mediagenic/Activision was only one of a number of companies that did not show. Electronic Arts was there, and co-marketed for a half-dozen smaller companies who last year might have had their own booth. Of course Broderbund, Beagle Bros, First Class Peripherals and Applied Engineering were there. Perhaps Cambridge Marketing needs to reconsider their booth-rental rates, as

there was grumbling about the costs associated with setting up at the fest being too high for all but the largest companies.

Jean-Louis Gasee, one of the real head honchos at Apple, gave the first day's keynote speech. His style was relaxed and entertaining. He showed System 5.02, which will be available soon. It fixes the BASIC.SYSTEM bug and some others, and adds two new features for disabled people.

A new CDEV permits the user to magnify the screen by a factor of 2, 4 or 8, for the visually-impaired, and a new NDA permits typing by those who have no use of their hands, using a headset to move the mouse and select characters from a "Video Keyboard" that appears on screen.

When a user asked a question about speeding up the GS, who should spring to the offensive but **Bill Mensch**, the designer of the 65xxx series of chips. Mr. Mensch held up "three 12 MHz 65816 chips" in reply to M. Gasee's claim that there were no reliable, faster GS microprocessors available in suitable quantities. M. Gasee managed to shut down what was beginning to shape up as a confrontation by claiming that Mensch could call him at any time when "production quantities" were available, while the latter insisted that he could not possibly start making those quantities until he had an order from Apple. Keep in mind that Mensch has had difficulties keeping Applied Engineering provided with the 7 MHz 65816 for their TransWarp card.

The Apple party for exhibitors was not nearly as extravagant as last year but was nice nonetheless.

Favourite Computer Personalities

In no particular order, the following three people are singled out by me for their friendliness and their dedication to producing good Apple II products.

Randy Brandt, who's responsible for TimeOut UltraMacros as well as a number of other products, and who is a co-author of AppleWorks 3.0. Randy's new version of UM is much more than an update for ApWks 3.0... it incorporates a number of new commands, and even has provision for an ampersand vector.

Roger Wagner, who has taken some criticism for releasing HyperStudio "unfinished". I think most of the criticism is undeserved. HS is a good package now, and will be better when version 2.0 is

released, hopefully in early October. Roger's company makes no secret of the fact that buyers to date have been receiving something short of the final package, and that free updates would be coming as soon as they are available.

Gary Little, who continues to embellish Point-to-Point. Version 4.0 was released at the show, and will be shipping in October. The most significant enhancement is the addition of a scripting language to replace the solid-apple macros. This will make PtP a much more powerful package.

... and a look at the social side of the event

By Pat Daley

Just a few words about Applefest from my point of view. I am sure Brian and Lorne will tell you about all the technical things they saw so I will restrict myself to non-technical things.



PAT DALEY

Applefest was once again held in the Brooks Hall area of the Civic Centre in San Francisco. The keynote speeches and the many seminars were held throughout the six or so floors of the Civic Centre. I attended the

opening day key note address by Jean-Louis Gasee. He spent his time telling us of the many advances in Apple // technology since day one. At no time did he indicate that Apple might introduce a new Apple // although he did say that Apple is still dedicated to the // line. This was followed by a question and answer period. Unfortunately I left during the question and answer session and missed the heated discussion between Bill Mensch (developer of the 6502 series of processors) and Jean-Louis.

The main display area in Brooks Hall

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Portable Macintosh

● continued from page 1

nology to achieve the superior graphic capabilities of the Macintosh. This technology enables the portable to depict the Macintosh graphical user interface, as well as sophisticated graphics, text, and animation with a fast response time, high contrast, and wide viewing angle. The portable's display size is 640-by-400 pixels, which is 50 percent larger than a Macintosh SE screen and as wide as a letter-size page. The system also features a video output port. This port can be used with an adapter to drive external monitors, projection video systems or overhead viewplates.

Portability

Macintosh portability is achieved through sophisticated power management circuitry and an all-in-one design. The system's power management components include:

Motorola CMOS 68000: Apple chose the CMOS (complementary metal oxide silicon) 68000 microprocessor from the same Motorola family of micro-processors as those found in all Macintosh personal computers. The CMOS 68000 requires 80 percent less power than standard technology chips. It runs at 16 MHz, providing roughly twice the performance of the Macintosh SE.

Low-power-consumption RAM: The Macintosh Portable contains 1MB of static RAM, which consumes less power than standard dynamic RAM (DRAM). It allows users to work for long periods

between battery charges and retains the contents of memory when the system is in sleep mode.

Lead acid batteries: The Portable uses lead acid batteries, which last from 6 to 12 hours (depending on usage and configuration) and can be recharged to full capacity at any time. The voltage of a lead acid battery diminishes gradually as power is used, enabling the computer to provide users with information about the power level. A battery Desk Accessory shows a meter that indicates the charge level left in the battery, much like a fuel gauge. Messages alert users when power is running low.

Separate power management microprocessor: This dedicated microprocessor monitors the activity of each component of the Portable. The Power Manager optimizes power allocation and automatically puts the system into a standby "rest" mode or into a "sleep" mode if the system has been inactive for a preset period as specified by the user. During the rest mode the system operating speed decreases from 16 MHz to 1 MHz. In the sleep mode the power to most components is turned off. Memory contents are retained in both rest and sleep modes. The Portable's Instant-On feature allows customers to wake up the system by simply pressing any key on the keyboard.

The following features comprise the system's all-in-one design:

Integrated pointing devices: The

system's integrated trackball and full-size keyboard make it easier for customers to set-up, pack-up, configure and use. The system's trackball can be positioned for left- or right-handed users. It can also be replaced by a numeric keypad. The Portable can also be used with a low-power mouse that is included with the system.

Rugged design: The Macintosh Portable is constructed to withstand the bumps and bangs of everyday use. It is made of rugged polycarbonate plastic, a material also used in motorcycle helmets. SuperDrive floppy disk drive and the optional 40MB hard disk are specially designed to ensure durability.

System expansion: The Portable has expansion connectors for additional RAM and ROM. It also has a connector for an internal modem. Apple today also introduced the Macintosh Portable Data Modem 2400, a 2400-baud internal modem that facilitates communication with other personal computers, minicomputers and mainframes, while maintaining low-power consumption.

The Portable's Processor Direct Slot (PDS) is a high-performance slot connected to the microprocessor bus that will support an expansion card. It allows third-party developers to create add-on products to extend the capabilities of the Portable.

Canadians suggested retail price is about \$9,000 for the model with 40-Mb hard drive and 2 Mb RAM.

DALEY ...on AppleFest

● continued from page 10

appeared to be smaller than last year and there were fewer vendors. Many of the vendors who had large booth last year had smaller booths this year. Although there were some announcements of new products I don't believe there was one that could be considered major. Hyper Studio from Roger Wagner Publishing was possibly the most popular program although the Beagle Bros booth was always very busy. They have new versions of many of the TimeOut series and they are now the publishers of the Styleware Apple // programs. Multiscribe is now Beagle Write.

It seems that Claris is attempting to steal a page from the Apple book. First they sold off all their Apple // products except Appleworks Classic and Appleworks GS and then decided not to even show up at Applefest. Maybe if they knew that Apple was going to lather their booth with Macs this year they might have shown up.

One has to wonder sometimes what Apple is doing. Why did they introduce the new II-GS in August and then have nothing new to announce at Applefest. Could it be that they didn't want to take the heat about the NEW II-GS.

Even the Apple bash was very low key, nothing compared to last year when we were treated to "flowing champagne and coffee and some very opulent desserts." Still I enjoyed myself as much as possible. There were lots of interesting people to talk to.

The highlight of the weekend for me was being able to spend some time talking to Lois Densmore. As you all know Lois is in charge of the User Groups in Canada. Lois made sure that any Canadian User Group member who attended Applefest was treated royally. Lois assured me that Apples B.C. will always have a special place in her heart and that she will see to it that we do not feel in the least way neglected. She will try to make it to Vancouver for our 10th Anniversary party in October. Failing that she will make arrangements to visit us in the new year.

Many of you remember Peter Sandys when he attended the June 87 Apple // meeting. Peter is Product Marketing Manager, Apple Pacific. He sends his regards to all our members and regrets that he will not be able to attend on Oct. 21st.

The ins and outs of removable hard disks

● *continued from page 8...*

mechanism are the most reliable. There are several manufacturers making such drives, with more appearing all the time. A couple of users had bad things to say about Peripheral Land Infinity drives.

Ben Lawson noted that although Syquest cartridges for these drives are the same for every company manufacturing this type of drive, because different companies use different drivers, a Syquest cartridge from one company's drive wouldn't necessarily be recognized by a different company's Syquest drive.

A problem with some RCDs is that when a cartridge is ejected, its icon leaves the desktop. This makes it impossible to copy one cartridge to another (for back up for example) using just one RCD drive. However, where this can be done (analogous to copying one floppy disk to another with one drive), it takes a long time with a 1MB Mac!

Despite having this problem, the DPI 44 Removable drive is highly recommended by BMUG (Berkeley Macintosh Users Group). They have used these drives constantly over the last year and have found them to be "fast, reliable, and trouble-free; the best of all the Syquest removable drives available".

BMUG also noted that the cartridges in these drives stay cool, which seems to lead to a lower rate of data loss and crashes (all manufacturers claim the cartridges will not lose data when exposed to high temperatures, but some of these tests are not being done when data is being written to a hot cartridge). These drives have a quoted average access time of 28ms, can be formatted to about 42 MB, and the price was quoted as varying from \$1295 to \$1795 US.

DPI drives are apparently available only from the company that makes them. When I called the company in California, I discovered that they were having a sale on both the drive (\$999 US) and the cartridges that it takes (\$100 US, usually selling for at least

\$129 US or \$200 CDN). The drive came with a one year warranty, and they sent it to me by mail which cost \$20 US.

Unfortunately the US postal system sent the drive to Bangkok so it took almost a month to get. DPI sent me a nice letter of apology, and after the drive's return to them, they checked the drive before sending it to me again. The drive came with a small 8-page manual that is barely adequate. Its print is so small that they should provide a magnifying glass to read it!

The floppy disk that came with the drive had the latest Mac system software (6.0.3), and a couple of utility programs for formatting the cartridges it takes. The cartridges that came with the drive (I ordered two extras) were formatted, but had no programs other than the utility programs.

Using the manual, it was easy to get the drive connected and running—its SCSI number is adjusted by means of a knob at the back of the machine. The drive is internally terminated, so it is most easily used at the start or end of a SCSI chain; the manual gives no indication as to whether or not the internal terminator can be removed, and stated that a maximum of two such drives can be used in a SCSI chain.

The manual also gives adequate warning about how to use the drive. If you try to remove a cartridge while the drive is reading from or writing to the cartridge (when a red LED light is on), the cartridge will be ruined, and the drive damaged.

Clearly this is not the drive for young hands. The manual says nothing about backing up one cartridge onto another using the same drive (as noted above this apparently can't be done with this brand of drive), but does suggest using the Apple HD BackUp program to backup onto 3.5 inch floppies (it was to avoid this that I got this drive in the first place!).

The manual has a care and maintenance section, and a troubleshooting section. While

the manual does not say that using the "programmer's switch" on the Mac to reset while writing to the drive will cause the drive to crash, I can verify that it does! It does not however destroy the cartridge, which needs to be reformatted before it can be used again. I have used this drive to back up my fixed-media hard disk, and also an 80 MB hard disk that a friend has. With both drives connected to a SCSI chain, backing up 40 MB takes between 5 and 10 minutes.

Any backup program could be used with the RCD, or, like its floppy cousins, it is just a matter of pulling the 40 MB hard disk's icon onto the DPI drive's icon, and going for coffee. In my tests, the average access time is 34 ms. So far I have had only one crash, and that was predictable. It appears to be rugged as I have moved it around without difficulty, and its cartridges apparently will stand up to a lot of abuse.

So far I am pleased with my DPI 44 removable, and would recommend this type of drive to anyone looking for a convenient way to back up another hard drive. With its removable cartridges, it has unlimited backup potential, although switching cartridges in and out of the drive is not as easy as using floppies.

I now have a cartridge with all my public domain programs on it, and my desk is no longer overflowing with floppies. Also the DPI 44 Removable is fast enough to be used as a main disk drive.

Its drawbacks are that the cartridges are relatively expensive compared to floppies, it has to be carefully used to avoid damaging its drive mechanism, and that it is better travelled than I am!

If you are considering buying this type of drive, one test you can do is to place a cartridge in the drive and leave the drive turned on for at least an hour (preferably reading and writing to the cartridge, and overnight would be better). If the cartridge doesn't stay cool, don't buy the drive. 

PD library for the GS

● *continued from page 7*

a few are one-quarter to one-half empty. Included are several sample stacks and some information about using HyperStudio with videodisk players, and more clip art. I expect this material to be the main item at the next GS SIG.

Disk 70: "MORE.STACKS" - HyperBrain, SolarSystem, Adventure game, and more.

Disk 71: "MORE.STACKS2" - Birds, Chessmoves, and more.

Disk 72: "VIDEO.DEMO" - Stacks for use with various video disks.

Disk 73: "COM.STACK" - A lesson on language and communications by a ninth-grade teacher.

Disk 74: "MUG.087" - A stack named "Read & Listen", from the Milwaukee User Group.

Disk 75: HS.ART2 - Clip art converted from Print Shop graphics.

Disk 76: "USA" - The start of a USA facts stack. Only contains Arizona so far.

Disk 77: "AZ.SNDS" - Sound effects for the USA stack.

Don't forget that the GS Library also contains some printed material, including a catalog from the Apple Programmers' and Developers' Association and two of Gary Little's books ("Apple Pro-

DOS" and "Exploring Apple GS/OS and ProDOS 8") and some technical notes. Anyone wishing to borrow one of these may do so for a month at a time, by letting me know in advance of a meeting that he'll be attending. See you at the copy session! 

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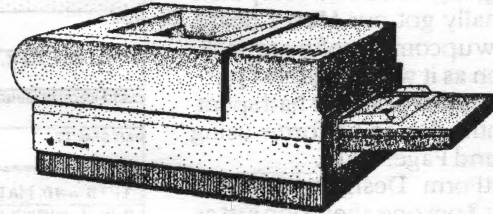
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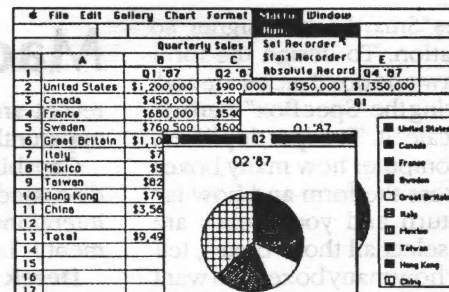
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Three free listings a year (within reason and as space permits) are offered to Apples B.C. members. Non-member rate is \$5.
Post on ABC board, indicating it is for newsletter publication or mail to address on page 3.

FOR SALE

Laser 128EX with 5.25" and 3.5" drives, Amber monitor, modem cable, software \$700 obo. Call **Jono** at 983-3189 or (ABC BBS #62).

Two **RAM cards** for sale, \$200 each:

1 **Applied Engineering GS RAM Card**, 1.5 mega-byte capacity, with 256K on board.

2 **Apple "Slinky"** (peripheral slot) Card, 1 mega-byte capacity, also with 256K on board. **Lorne Walton** 467-6062 or (ABC BBS #7)

IMAGEWRITER II for sale. It is white, and has an Orange Micro 128K print buffer, and two colour and 3 black ribbons. All for \$600. Also have a platinum IW II cutsheet feeder, under AppleCare. With original manuals. Any offers on the whole set up? Call **Brian Symonds** 1-485-9123 or (ABC BBS #52)

Save on ribbons.

Re-inked printer ribbons for ImageWriter I and II, also Epson 80s. \$3.00 when you "trade-in" your used ribbon. Call **Ib** at 299-9597, I am at all Apple // and Macintosh meetings.

Okidata printer 93, bought in 1984 for \$1123.00. Apple-compatible Microline. Macintosh serial cable incl. Asking Price: \$200.00 call **Jim Swenor** at 271-7432 or (ABC BBS #19)

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Full-page ad size is: 7 1/2" X 9 1/4"; 1/2 and 1/4 page correspondingly. Ads must be camera-ready or—better still—in PageMaker format (standard LaserWriter Plus fonts only, unless downloadable made available on loan). Deadline is 25th of the month for the next month's issue.

FOR SALE

I have an **Applied Eng. GS RAM** card available, containing the basic 256K. With RAM prices dropping steadily, you should be able to fill this baby relatively cheaply in the near future. Move 3 banks of the chips from your Apple GS Memory card over, and you have the 1MB that you started out with, plus space for a further 512K. I think \$200 should be a pretty good price for this one. Call **Lorne** at 467-6062, or (ABC BBS #7).

WANTED

One **hard drive** 20MB external for Macintosh needed. Call **Jim Swenor** at 271-7432 or (ABC BBS #19)

Programmers/investors interested in helping to start a new Apple // educational software company. Product line already well developed. Please contact **Phil Shapiro**, 5201 Chevy Chase Pkwy., NW, Washington D.C., 20015, USA (202) 686-5465

Internal Clock Card for Apple //+. Will pay up to \$30.00. **Noel Allen** (ABC BBS #97) or call 467-9082, ProDOS only please, will pay more if reasonable

So, does anyone have a **composite colour monitor** available for sale? Preferably used, in great condition, and cheap. I want to be talked into buying one. **Charles Siegel** (#46 ABC BBS) or 228-8727

Wanted buyers for Diskettes

am able to get 3.5" SKC diskettes at \$19/per box. I can also get 5.25" SKC disks for \$6.00 a box. These disks are completely guaranteed (the 3.5"s too). Any trouble and I'll get a replacement.

The price breakdown is:

5.25" disks \$5.64 + 6% = \$6.00
3.5" disks \$17.86 + 6% = \$19.00

My phone is 590-1480 and I am almost always at the apple II meetings and will bring some along.

Marty Summers (#108 ABC BBS) or 590-1480

RamWorks card for Apple //e, call **Mike Horne** at home: 420-1497, or (ABC BBS #53)

ANNOUNCEMENTS

It is time again to thank the companies that support our club with donations and special prices on products we need to run the club.

Apple Canada who has donated the Mac SE /20 on which this newsletter is produced. An Apple //e with a 10 Meg. hard disk which is being used to run our BBS/information system.

Microsoft (Canada) Inc. who donated MS-Word 3.0 to write the newsletter

Aldus Corporation who sold us PageMaker 3.0 at a special user group price.

Epic Technology who donated a 2400 baud modem to the club to be used on our BBS.

Finally, but not least, the dealers who make donations to us for our events, alphabetically:

Advantage Computers
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The newsletter is printed on an aging Apple LaserWriter+ by **Steve St-Laurent**. Steve also gives your Editor help and advice with the page layout.

If you, or somebody you know, need work done in page layout give Steve a call at 255-3238.

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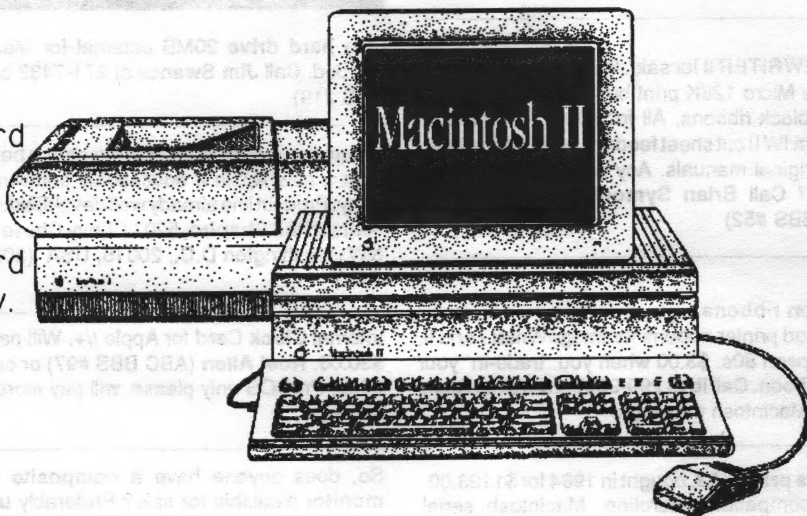
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